

**APPARATUS AND METHOD FOR INTER-PROGRAM AUTHENTICATION  
USING DYNAMICALLY-GENERATED PUBLIC/PRIVATE KEY PAIRS**

**ABSTRACT OF THE DISCLOSURE**

In a multi-tiered computing environment, a first program may authenticate with a  
5 second program using dynamically-generated public/private key pairs. An authentication  
token is constructed that includes user information and information about the first  
program and the second program. The first program then digitally signs the  
authentication token using the dynamically-generated private key, and sends the  
authentication token to the second program. The second program then verifies the  
10 authentication token using the public key corresponding to the first program. Once  
verified, the first program is authenticated to the second program. The second program  
may then authenticate to a next-tier program by constructing an authentication token that  
includes the information in the authentication token received from the first program. This  
may continue to any suitable number of tiers, using dynamically-generated public/private  
15 key pairs to allow authentication between programs without requiring any user interaction  
or input from a system administrator.